

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

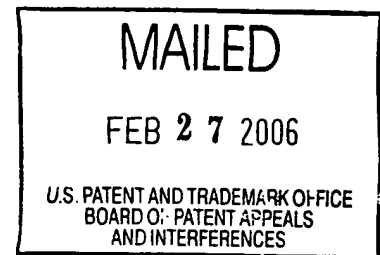
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ADAM THIER

Appeal No. 2006-0072
Application No. 09/575,599

ON BRIEF



Before HAIRSTON, BLANKENSHIP, and MACDONALD, Administrative Patent Judges.
BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-42 and 44-51, which are all the claims remaining in the application.

We affirm.

BACKGROUND

The invention relates to statistically quantifying sales opportunities in order to forecast revenue and generate sales plans. Representative Claim 1 is reproduced below.

1. A method comprising:

storing in a database data defining a mathematical model having a plurality of related objects that represent business opportunities and conditions associated with achieving the business opportunities;

receiving input data from a plurality of users, wherein the input data indicates a status of at least one of the conditions associated with one of the business opportunities; and

generating a probability set indicating the probability of successfully achieving the business opportunities as a function of the input data and the mathematical model.

The examiner relies on the following references:

| | | |
|--------------------------|-----------------|---------------------------------------|
| Arbabi et al. (Arbabi) | 5,461,699 | Oct. 24, 1995 |
| Johnson et al. (Johnson) | 6,067,525 | May 23, 2000 (filed Oct. 30, 1995) |
| Lazarus et al. (Lazarus) | US 6,430,539 B1 | Aug. 6, 2002 (filed May 6, 1999) |

Claims 1-3, 5-8, 10-13, 15, 16, 25-29, and 31-34 stand rejected under 35 U.S.C. § 102 as being anticipated by Johnson.

Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Johnson and Arbabi.

Claims 9, 14, 17-24, 30, 35-42, and 44-51 stand rejected under 35 U.S.C. § 103 as being unpatentable over Johnson and Lazarus.

We refer to the Final Rejection (mailed Sep. 24, 2003) and the Examiner's Answer (mailed Jun. 28, 2004) for a statement of the examiner's position and to the Brief (filed Mar. 29, 2004) for appellant's position with respect to the claims which stand rejected.

OPINION

Consistent with appellant's arguments in the Brief and the rules effective at its filing, we will consider representative claims. See 37 CFR § 1.192(c)(7) (2003). See also In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) ("If the brief fails to meet either requirement [of 37 CFR § 1.192(c)(7)], the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim.").

The examiner sets out, at page 4 of the Answer, how instant claim 1 is deemed to read on the Johnson reference. Appellant contends, however, that the "data and formula matrix" described at column 26 of the reference is not a "mathematical model" within the meaning of the claim. Appellant submits that "mathematical model" means a mathematical representation of reality, while "matrix" means a set of numbers arranged in rows and columns so as to form a rectangular array. Appellant adds that, even

assuming the “data and formula matrix” may be considered a mathematical model as claimed, Johnson provides no enabling disclosure as to how a set of probabilities could be calculated. The reference is submitted to provide nothing more than vague mention of the calculation of probabilities of closing sales, with no explanation of how the probabilities are to be generated. (Brief at 13-15.)

We are in general agreement with the examiner’s response at pages 9 to 11 of the Answer. Johnson discloses, at column 26, lines 9 through 18, sales processes data tool 1210 (Fig. 12) that includes a “data and formula matrix” used to calculate probability of closing sales opportunities. Sales processes data tool 1210 is part of data tools subsystem 205 of the back office system 200 (col. 25, ll. 16-17), which in turn is part of the overall salesforce automation system 20 (col. 7, l. 57 - col. 8, l. 33; Fig. 2). Data stored in the system includes, for example, prices, specifications, competition, features and benefits, leads, names, financing, and sales programs. Col. 4, ll. 36-40; col. 7, ll. 19-27. The information is available for calculating probability of closing sales opportunities.

Johnson further teaches integrating object-oriented architecture into salesforce automation system 20. Col. 8, ll. 2-7. We fail to see why the information used in calculating probability of closing sales opportunities cannot be considered as including “a plurality of related objects that represent business opportunities and conditions associated with achieving the business opportunities,” as broadly claimed. We agree with appellant to the extent that Johnson does not describe the system in the same

terms as used in the instant claims. For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. However, this is not an “ipsissimis verbis” test. In re Bond, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990).

The “data and formula matrix” described by Johnson clearly represents more than a “matrix” in its simplest form -- i.e., more than a set of numbers arranged in rows and columns so as to form a rectangular array. The “data and formula matrix” is used to calculate probabilities, as clearly expressed by the reference. Absent supporting evidence adduced by appellant to show that the artisan would not be able to calculate probabilities with the information provided by Johnson -- i.e., that the reference is non-enabling -- we consider the examiner’s position to be better founded.

With respect to claim 10, appellant submits that Johnson at column 33 refers to dynamically altering rules in the “event manager,” which is not a reference to the “data and formula matrix.” Appellant also argues that Johnson at column 35 fails to disclose the subject matter of claim 10. (Brief at 15-16.) The examiner further relies, however, on column 26, lines 9 through 12, which describes the sales processes data tool 1210 as provided to “create, edit and maintain data elements” used to support the objective management module in the self management component of the salesperson support system 100. Because the data and formula matrix is part of sales processes tool 1210, we find that the reference is consistent with the examiner’s reading.

Appellant also argues that the “inference engine” described at columns 33 and 35 of Johnson is “entirely different from” a statistical engine as recited in instant claim 8. Appellant further submits that the described “inference engine” has nothing to do with the data and formula matrix. (Brief at 16.) As the examiner notes, however (Answer at 11), the inference engine is incorporated into expert system 2002 of Johnson, which is able to dynamically update the probability of a sale (Johnson col. 35, ll. 19-24). In addition, appellant’s position that an inference engine as described by Johnson is “entirely different” from a statistical engine is not persuasive. Appellant’s specification teaches (at 5, ll. 17-22) that the statistical engine may be embodied as an expert system having an adaptive inference engine.

Appellant contends that the § 103 rejection of claim 17 over Johnson and Lazarus is in error because the examiner refers to the same portions of Johnson for the teaching of “storing a first set of probabilities received from a user representing estimated probabilities for achieving the opportunities” as was used for the teaching of generating a probability set based on a mathematical model in the § 102 rejection over Johnson. (Brief at 18-19.) The examiner points out (Answer at 12), however, that Johnson also teaches in column 21 (lines 43 through 48) that the system includes data for opportunities with a stated prediction of close that may be input on a user estimated basis. Appellant further alleges deficiencies in the Lazarus reference, but does not show that why the teachings of Lazarus when combined with those of Johnson fail to demonstrate prima facie obviousness of the subject matter as a whole, particularly in

light of the examiner's further analysis of Lazarus at pages 12 and 13 of the Answer. Nonobviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references. In re Merck & Co., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986) (citing In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)).

Appellant's remarks in nominal support of claim 49 are not arguments as to why the claim is believed to be separately patentable. To the extent that the remarks might be considered as such, we refer to the examiner's findings in the Answer. We are not persuaded by the "reasons set forth above" in the Brief.

With respect to claim 50, appellant submits that the examiner failed to provide evidence in support of Official Notice that $P(M/D)$ is the conditional probability of (M/D), old and well known in the theory of statistics. Appellant further submits that the "Official Notice" fails to provide any evidence of a teaching or suggestion as to how such techniques could be applied to the Johnson system. (Brief at 21.) We note, however, that the teachings of Lazarus are also applied against claim 50.

The examiner, in response, refers to a statistics text to show that Bayes' theorem was well known in the art, consistent with appellant's teachings in the specification at page 6. The examiner finds that the motivation to use the well known technique of conditional probability derives from the advantage that probabilities can be revised based on new information. We consider the examiner's findings and conclusion to be reasonable, and we have not been persuaded otherwise.

For the foregoing reasons, we sustain the rejection of claims 1-3, 5-8, 10-13, 15, 16, 25-29, and 31-34 under 35 U.S.C. § 102 as being anticipated by Johnson and the rejection of claims 9, 14, 17-24, 30, 35-42, and 44-51 under 35 U.S.C. § 103 as being unpatentable over Johnson and Lazarus.

We also sustain the rejection of claim 4 under 35 U.S.C. § 103 as being unpatentable over Johnson and Arbabi. Appellant does not appear to submit arguments in response to the rejection, but does contend (Answer at 11) that Arbabi mentions a PDA for executing neural network software and not for sending input data to another device. We consider that at least column 15, lines 11 through 33 of Arbabi is sufficient support for the examiner's finding of suggestion for the use of a PDA to gather input data.

CONCLUSION

The rejection of claims 1-3, 5-8, 10-13, 15, 16, 25-29, and 31-34 under 35 U.S.C. § 102 and the rejection of claims 4, 9, 14, 17-24, 30, 35-42, and 44-51 under 35 U.S.C. § 103 are affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). See 37 CFR § 1.136(a)(1)(iv).

AFFIRMED


KENNETH W. HAIRSTON
Administrative Patent Judge

Howard B. Blankenship
HOWARD B. BLANKENSHIP
Administrative Patent Judge


ALLEN R. MACDONALD
Administrative Patent Judge

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